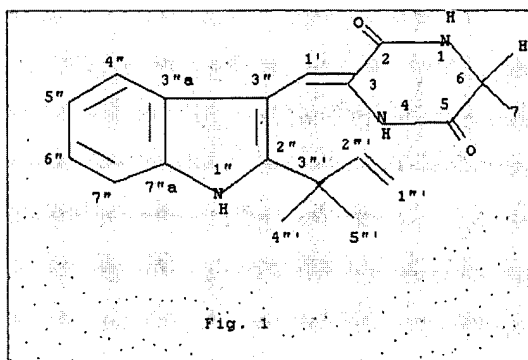
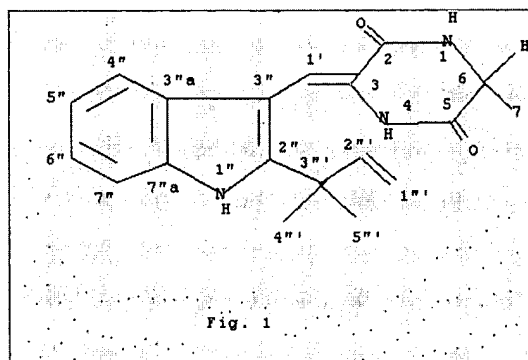


We claim:

1. 3,1'-didehydro-3 [2'' (3''', 3'''- dimethyl - prop - 2 - enyl) - 3''- indolyl methylene]-6 - methylpiperazine-2,5-dione extracted from a mangrove-associated fungus *Penicillium chrysogenum* having antibacterial activity, represented by a general formula $C_{19}H_{21}O_2N_3$ and structural formula as shown in Figure 1.



2. A compound as claimed in claim 1, wherein the said compound shows antibacterial activity against the human pathogen *Vibrio cholerae*.
3. A process of isolation of 3,1'-didehydro-3 [2'' (3''', 3'''- dimethyl - prop - 2 - enyl) - 3''- indolyl methylene]-6 - methylpiperazine-2,5-dione as shown in Figure 1



from a fungus *Penicillium chrysogenum*, said process comprising the steps:

- a) growing *Penicillium chrysogenum* in a fermentation broth comprising potato dextrose agar, sea water and distilled water;
- b) extracting the fermentation broth with a solvent to obtain the filtrate;
- c) evaporating the filtrate of step (b) to obtain a crude extract;

- d) isolating the impure chrysogenazine from the crude extract of step (c) by chromatographic fractionation, and
 - e) purifying the impure chrysogenazine of step (d) using gel chromatography to obtain the pure chrysogenazine.
- 5 4. A process as claimed in claim 3, wherein in step (a), seawater and distilled water is mixed in 1:1 ratio.
 5. A process as claimed in claim 3, wherein in step (b), the solvent is selected from a group comprising of chloroform and ethyl acetate.
 6. A process as claimed in claim 5, wherein the solvent is chloroform.
 - 10 7. A process as claimed in claim 3, wherein in step (c), the evaporation is performed under vacuum.
 8. A process as claimed in claim 3, wherein in step (d), the chromatographic fractionation is performed by column chromatography and thin layer chromatography.
 9. A process as claimed in claim 8, wherein silica gel chromatography is used for fractionation.
 - 15 10. A process as claimed in claim 9, wherein in silica gel chromatography the eluent used is mixture of petroleum ether and ethyl acetate.
 11. A process as claimed in claim 9, wherein in the chromatography the adsorbent used is silica gel with a pore size of 60-120Å.
 - 20 12. A process as claimed in claim 3, wherein in step (e), the adsorbent used in gel chromatography is Sephadex LH-20.
 13. A process as claimed in claim 3, wherein in step (e), chloroform and methanol mixture is used as an eluent in gel chromatography.
 14. A process as claimed in claim 13, wherein the chloroform and methanol are mixed in 1:1 ratio.
 - 25 15. A process as claimed in claim 13, wherein *Penicillium chrysogenum* is *Penicillium chrysogenum*, bearing accession No. MTCC 5108.